CHAPTER EIGHT

URBANIZATION, 1880 TO 1930

MAJOR DEVELOPMENTS

- ☐ Industrial expansion and the Gilded Age, 1880 to 1900
- ☐ Progressive Era, 1900 to 1920
- ☐ The Roaring Twenties, 1920 to 1929

SIGNIFICANT EVENTS

- ☐ Wooden skipjack sailing vessels specially adapted to Chesapeake waters are first produced during the early 1880s.
- ☐ The Virginia assembly votes funds to establish the Normal and Collegiate Institute for Negroes and Central Hospital for mentally ill African Americans in Petersburg, 1882.
- ☐ Adoption of the standard gauge links all railroads in the region and the nation, 1886.
- ☐ America's first electrified trolley line opens in Richmond, 1888.
- ☐ The nation's first state historic preservation organization, the Association for the Preservation of Virginia Antiquities, is organized in Richmond, 1889.
- ☐ The Economic Panic of 1893 plunges the nation into a five year depression.
- ☐ A group of protestor's demanding economic reform marches on Washington in 1894. Known as Coxey's Army, they are forcibly driven from the capital.
- ☐ Spanish-American War, fought with Spain between 1898 and 1899.
- ☐ Region population reaches three million in 1900.

- ☐ Internal combustion engines power the first commercially successful wheeled vehicles and airplanes between 1900 and 1910.
- ☐ The Great Baltimore Fire destroys the city center, 1904.
- ☐ Passenger pigeons become extinct in the wild, 1914.
- ☐ World War I embroils the European powers between 1914 and 1918.
- ☐ America enters World War I on the side of the Allies in 1917.
- ☐ The allies defeat the Central powers in 1918. The worldwide Spanish influenza epidemic strikes the region later that year. The Migratory Bird Treaty Act of 1918 outlaws the killing of whistling swans, establishes hunting seasons, and sets bag limits on waterfowl migrating across international boundaries.
- ☐ Regional population exceeds 4.5 million, 1920.
- ☐ Robert H. Goddard launches the first successful liquid fuel rocket in Maryland, 1926.
- ☐ The stock market crash begins the Great Depression, 1929.

AN ECOLOGY OF PEOPLE AND PLACE

People

Extraordinary changes swept across the United States and the world between 1880 and 1930. These changes continued to alter Chesapeake Bay life, from the countryside to the city. The region's population swelled from 2.5 million in 1880 to five million by 1930. Many of these people settled in established cities such as Baltimore, Washington, Richmond, and Norfolk. Washington's numbers grew at an incredible pace, rising from about 75,000 in 1880 to 1.4 million by 1920. Many people also moved to newer urban centers such as Newport News, a sleepy town

that grew quickly after the president of the Chesapeake and Ohio Railroad, Collis P. Huntington, chose it as a key terminal and shipyard in the 1890s. In sharp contrast, the rural population either stayed steady or began to drop.

Most people living in the region were native born Americans. Although white Americans outnumbered African Americans by four or five to one, black people held the majority in many rural communities. While twenty-five million European immigrants came to the United States between 1880 and 1930, only a few tens of thousands settled in the Chesapeake area; the rest stayed farther north or went west. Most of the region's new immigrants moved to big cities, where many African Americans were also moving. Once the United States had entered World War I in 1917, even greater numbers of African Americans and immigrants were drawn to these cities by the prospect of work in the many war industries there.

Important technological innovations fueled this massive rise in population. First, innovators increased the efficiency of earlier technologies based on wind, water, wood, and coal. Invention of an innovative lubrication system eliminating the need to climb high towers fueled a boom in metal wind mill sales during the 1910s and 1920s. Wind mills and other traditional energy sources were replaced by new forms of energy generation using electricity and petrochemicals energy by 1930. Agriculture incorporated these new energy technologies in the forms of mass produced tractors and mechanical reapers. Electric motors and internal combustion engines powered by gasoline and diesel gradually replaced wind mills, sails, and steam boilers.

Steel produced in mills using the new Bessemer process gave shipwrights, bridge builders, and manufacturers a lighter, stronger, and cheaper material. New gas and oil fueled limelight beacons shone from the many lighthouses built to mark headlands, shallows, rock outcrops, and

other navigational dhazards along the Bay's busy shipping lanes. Swift, stable, and shallow draft boats called skipjacks able to navigate the shallow waters of the Bay were first produced in the early 1880s; they represented the technological peak for wooden sailing ships in the region. Evidently named both for the vessel's ability to skip above the waves and for its skipper-like command of the water, the word skipjack combines the Dutch word for ship, schip, with jack, a seventeenth-century English word for sailor (jack tar). Larger, propeller driven warships, powered by steam and made of steel and rivets, slid down to shipyards in Washington, Baltimore, Norfolk, and Newport News. Steam railroads also reached the peak of their development as the last of the canals requiring gated locks to carry boats across changes in elevation closed. Only waterways providing unobstructed navigation, such as the rebuilt Chesapeake and Delaware Canal, remained open.

Railroads, in turn, began to face challenges posed by automobiles and airplanes, both of which were invented and perfected during this period. Roadways began to be paved with concrete and asphalt. Soon paved roads criscrossed the region, making driving cars much more comfortable. Grass covered landing fields for airplanes appeared on military bases, city lots, and farm meadows. And in 1926, Robert H. Goddard launched the first successful liquid fuel rocket on a Maryland beach. Unlike solid fuel gunpowder propelled rockets, which had been in use since medieval times, liquid fuel rockets represented a quantum leap in power, possessing the ability to carry payloads over vast distances with supersonic swiftness.

In the cities, electrified trolley lines replaced horse drawn street cars and carriages. The nation's first electrified line began operating on Richmond's streets in 1888. City streets in the Washington, Baltimore, and Richmond metropolitan areas – formerly shell covered, filled with

bricks, or stone cobbled – began to be paved to aid riders of the just invented and very popular bicycle. By the turn of the century, these and other routes were flattened and widened to accommodate automobiles, buses, and trucks. Soon after, electrified light rail lines started providing high speed links between Chesapeake Bay cities and towns.

Advances in medical knowledge and vigorous public health policies also had major effects between 1880 and 1930. Researchers were able to subdue ancient plagues such as cholera, smallpox, and yellow fever. Health standards improved, and people lived longer. Many public health facilities were built. Sanitariums and rest homes sheltered those suffering from persistent ailments such as tuberculosis and mental illness. Preventoriums, were rural institutions built to house city people at high risk of getting infectious diseases. Public agencies and private organizations created community hospitals and opened clinics in all but the region's most rural parts. Municipalities took on more responsibilities, working to improve sewage systems, build and maintain roads, erect water treatment plants, and dam rivers to create new reservoirs. New advances in naval, aeronautical, and civil engineering were pioneered and put into use in military bases. The Variable Density Tunnel built in 1921 in Virginia's Langley Field, was an innovative experimental facility used to test and develop new aircraft designs. Other advances in ordinance and logistical development occurred in the many installations around Washington, D.C. that were built or expanded to support American involvement in the Spanish-American War (1898-1899) and World War I (1917-1918).

The arts and sciences flourished in the region's many colleges, museums, and conservatories. Chesapeake Bay artists, musicians, journalists, and writers such as Baltimore's wittily acerbic H. L. Mencken, whose house today is a National Historic Landmark, greatly

enhanced the nation's cultural life. But no amount of skill, sophistication, or scholarship could end social problems such as race prejudice or halt epidemics such as the deadly worldwide Spanish influenza outbreak that struck the region in 1918, killing thousands in the Chesapeake region.

Electric current came into widespread use as a power source during this era as well. First treated as a curiosity, it soon lit up homes, workplaces, and streets, not to mention power phonographs, radios, and movie projectors. It also carried messages throughout the region to the rest of the United States and the world on telephones developed during the 1880s and wireless radios first introduced during the following decade. Radio waves, broadcast from high steel towers, brought Chesapeake Bay people into closer contact with the world than ever. And steel began to change the face of towns as well. As wooden downtown buildings fell to the wrecker's ball or burned in catastrophic fires (like the blaze that devastated Baltimore's business district in 1904), new steel towers rose in their place. The newly invented elevators allowed builders to erect skyscrapers for powerful corporations on pricey downtown real estate. Washington remained the only city in the region to limit the height of its buildings. It did so to uphold a tradition requiring that no building should stand taller than the capitol, a tradition that Thomas Jefferson had started; this was formalized into a law in 1899.

The period between 1880 and 1930 is remembered today as a more self assured, serene, and hopeful time. We call its earlier decades the Gilded Age, and its later years the Progressive Era and the Roaring Twenties. Yet this period was marked by social turmoil, political struggle, and wild economic swings. The boom-bust business cycle that had characterized the American economy from its beginnings continued. The prosperous years of the 1880s railroad boom, for example, were followed by the Panic of 1893 and a five year depression that made many

unemployed workers doubt the national ethic that hard work leads to success. In 1894, several hundred impoverished workers known as Coxey's Army (named after Jacob Coxey, a self taught economist from Massillion, Ohio) came to Washington to protest conditions and press for a federal public-works program to create jobs. Instead of being heard, they were forcibly removed. But attempts to improve conditions continued. Unions organized, workers struck for better pay and working conditions, and the federal government struggled to limit the power of big business trusts and monopolies. Labor unions vied with the powerful political machines that swapped votes for jobs in the region's cities and towns.

Prosperity came to many through the shipyards, military installations, and factories that produced arms and munitions for American troops (which fought in the Spanish-American War and World War I during these years). But serious social problems persisted. Among these were city slums, widespread poverty, child labor and worker exploitation, race and gender bias, immigrant assimilation, political corruption, and corporate greed. These issues spurred organizations aimed at reform, including municipal leagues, the American Federation of Labor, the more radical Industrial Workers of the World, the National American Women's Suffrage Association, the National Association for the Advancement of Colored People, and the agrarian grangers and populists. Although they had different goals, most of these organizations looked to the federal government to pass legislation favoring their causes.

People also formed civic organizations to instill and inspire patriotic sentiments. These groups began preserving sites linked to colonial forebears, and they built the first monuments honoring Civil War soldiers. The nation's first state organization aimed at historic preservation, the Association for Preservation of Virginia Antiquities, was organized by a group of socially

prominent women and men in Richmond in 1889. Association members helped preserve and interpret historic sites in places such as Williamsburg, Jamestown, and the greater Richmond area. Women in the association also made efforts to honor the Confederacy by linking colonial sites with Civil War events and personalities. They preserved several battlefields, restored war cemeteries, and prevented the demolition of threatened sites such as the White House of the Confederacy in Richmond.

The era also saw the founding of many social, cultural, professional, fraternal, and youth organizations. Groups such as the American Medical Association , the American Anthropological Association, the Boy and Girl Scouts, and the American Bar Association sought and received national charters. Each encouraged technical skill and excellence, moral integrity, citizenship, and other values identified with the middle class. The growing ranks of urban, white collar workers in Baltimore, Washington, and other American cities embraced these values. And blue collar industrial laborers saw to it that their sons and daughters received the educations they would need to move up in society.

More reactionary movements also grew stronger in the early decades of the twentieth century. Anti-immigrant and white supremacist organizations such as the Ku Klux Klan became much more influential in the period's last decades. And groups sometimes made strange alliances that highlight the era's complexities. For example, new immigrants – who often competed with African Americans for jobs as unskilled laborers – sometimes found themselves agreeing with racists who were otherwise far from friendly to their interests.

The years between 1880 and 1930 were difficult for African Americans. Although canny marketeers such as Richmond's Margaret L. "Maggie" Walker made huge fortunes, nearly all

African Americans suffered from poverty and intense discrimination. Gains were made in the decades just after the war – as when the Virginia assembly established the Normal and Collegiate Institute for Negroes and the Central Hospital for mentally ill African Americans - but these were lost when Virginia joined other Southern states by passing voting laws that took the vote from African Americans in the final years of the nineteenth century. Other Jim Crow laws formally defined people of mixed ancestry as colored or negroes, strictly segregated the races, and otherwise made African Americans into second class citizens.

Hopes for African American equality were suppressed by terror as well as law. The Black Codes required absolute subordination and subservience, and men believed to have violated them were kidnaped, tortured, and hanged by racist vigilantes. Lynchings became distressingly common during the depression years of the mid-1890s, when racist whites vented their frustrations on black neighbors. Hundreds of thousands of African Americans moved north to cities such as Washington, D.C., and Baltimore to escape lynch laws and find work and security. Denied all but the most unskilled labor, most were forced to move into neglected tenements in the most rundown parts of town. Municipal agencies and local assistance organizations would not serve them, so they formed banks, churches, and self help associations of their own.

When the nation mobilized for World War I, government authority grew in ways not seen since the Civil War. The federal government nationalized railroads, rationed food and fuel, and worked with states to establish war industry boards requiring industries to give first priority to military production. Old bases were reactivated and new camps, installations, and stations constructed throughout the Chesapeake Bay region. Hundreds of warships and merchant vessels were produced in shipyards in Washington, Baltimore, and Newport News. Uniforms and other

equipment were manufactured in Richmond, Baltimore, and mill towns throughout the region. Thousands of Chesapeake Bay men, both black and white, were drafted. Many of them served in France. Because they were serving in a segregated army, most African American troops were relegated to digging trenches, carrying supplies, and other manual labor performed by work battalions. Women, who had been barred from factory work, took jobs in industries needing replacements for departing servicemen. Other women sold war bonds, collected scrap metal for the war effort, and served as nurses in camps at home and abroad.

The war effort fueled a prosperity that carried into the 1920s. Products from America's farms and factories found ready markets at home and abroad, and stock speculation heated an already hot market. Some items on the progressive agenda, such as women's suffrage and prohibition, were enacted into law. Congress also passed reactionary legislation, such as the 1924 Immigration Act, which drastically slashed immigration quotas and barred further immigration from Asia. Other causes, such as the struggle against racial discrimination, had to wait for later times and legislatures.

During this decade, the people of the United States looked inward and sought entertainment in amusement parks, resorts such as Maryland's Chesapeake Beach and Piney Point, movie houses, and, for many, speakeasies that catered to those with outlawed tastes for alcohol, gambling, and other vices. But the Roaring Twenties ended suddenly on October 29, 1929. On a day known as Black Tuesday, an enormous drop in stock prices plunged the Chesapeake region and the rest of the United States into an economic decline. This period is now remembered as the Great Depression.

Place

Between 1880 and 1930, unprecedented changes in society and technology allowed people to transform Chesapeake Bay lands, waters, and skies. They altered this region of the earth in ways no one had thought possible or even desired. Valuable innovations often affected the environment, sometimes in unexpected ways. For example, after 1886, railroad companies began using the same gauge rail, making their lines compatible. This meant that trains could run freely throughout the region. Thus the steam engines of the Baltimore and Ohio, Chesapeake and Ohio, and Norfolk Southern Lines could bring in western livestock, mid-western grain, Pittsburgh steel, Northern manufactures, and Southern mill products. These imports enriched life in Chesapeake Bay cities, towns, and farms. But these engines hauled and burned coal. The coal was mined in fields in the upper reaches of the Potomac and Susquehanna River Valleys. Tailings and other wastes from the mines were flushed into nearby rivers, where they mixed with sediments washed from deforested uplands. These were joined by soils eroded from farm fields, by factory wastes, and by municipal sewage. These rivers flowed across the Piedmont and coastal plain into the Bay. Many fish, shellfish, plants, and other aquatic life sickened and died in the toxic, murky waters at the mouths of Chesapeake Bay rivers.

Each new form of energy took its toll. When natural energy sources such as wood and wind were replaced with coal, oil, and gas, nonbiodegradable pollutants permeated the region. And the burning of coal to fuel furnaces, heat boilers, or turn steam turbines may have gotten rid of the problems caused by earlier sources of power – the smoke from wood fires and the manure runoff wastes from horses and other draft animals – but coal also created serious problems. Coal burned in engines, plants, and homes poured smoke into the region's skies. Highly acidic coal

mining wastes were released into Chesapeake drainage rivers. Coal miners and stokers breathed ever growing quantities of lethal coal dust into their lungs, paying a steep price for progress. Other costs are harder to measure. While we do know that average temperatures worldwide have been rising since the 1880s, no direct evidence has yet proved that burning coal and other fuels helped create this trend.

In the late nineteenth century, sport fishermen and agency scientists published reports speculating that increased water pollution was threatening the eel grass in Chesapeake Bay waters. Other reports showed that water chestnut and Eurasian watermilfoil – invasive water plants accidently introduced into Bay waters by passing ships – began taking space, light, and nutrients away from eel grasses and other native water plants sometime between 1880 and 1900. More and more aware of how important underwater plants are to Bay ecology, the region's scientists and conservationists began to study their life cycles and habitat needs at that time.

Forests also suffered from the increase in people and industry. By 1900, less than thirty percent of the Chesapeake Bay watershed's original forests remained. Woodsmen could no longer find standing trees large enough to supply the shingles and shakes widely used for roofs and siding. They began to mine the ancient bald cypress and Atlantic white cedar trunks buried in bogs on the Pocomoke River and elsewhere. Most of the cleared lands in the coastal plain and Piedmont valleys were turned to agricultural or livestock uses. People also drained wetlands to create more farmland and to remove the breeding grounds of mosquitoes and other insect pests, changing the sorts of trees that could survive in these tidewater areas. Farther inland, clear cutting increased erosion and changed the chemical composition of soils by exposing them to sun, wind, and rain. These changes made it harder for new trees to reclaim logged tracts, especially in steep,

hilly areas. And foreign tree diseases – chestnut blight and Dutch elm disease – all but exterminated chestnut and elm trees in the region.

Pollution and intensified use also had serious effects on Chesapeake Bay fish and shellfish populations in this period. The first effects showed up in populations. Virginia's and Maryland's game records, first kept in the 1880s, show that American shad, Atlantic menhaden, alewife herring, American croaker, and other fin-fish supported a large commercial fishery. By 1920, more than sixty million pounds of fish were reported to have been taken from Bay waters. Of this amount, twelve million pounds, then valued at $850,000, came from Maryland. The remaining forty-eight million pounds, worth $2.4 million at the time, came from Virginia. About ninety percent of the entire catch consisted of alewives, croakers, shad, and squeteagues.

We don't have statistics revealing exactly how far fish populations had declined. But the situation concerned fish and wildlife officials enough to make them start to open fish hatcheries, beginning in the late 1870s. They were concerned not only about over-fishing, but also by the construction of dams that blocked spawning streams, keeping fish from being able to lay their eggs and depriving their young of a safe habitat. Hatcheries and artificial oyster beds became increasing common by the turn of the century. Bag limits were enacted, but poaching grew into a major problem as fishermen ignored these limits. Oystermen couldn't make a living by working clam banks in the open water, because these banks had been depleted. Instead, they continued to raid each other's beds and nurseries.

Birds were affected by environmental changes as well. In the early 1900s, concerned bird enthusiasts – members of the newly founded Audubon Society – began conducting bird counts on the Bay every Christmas. Their activities, along with those of state fish and game agents, became

important tools for estimating bird population sizes, varieties, and distributions. Observations made by ornithologists helped show how other changes in the environment affected birds. They noted that drought and decreases in eel grass and other underwater plants threatened the Bay's populations of canvasback ducks and other waterfowl.

Unrestricted market and sport shooting, too, had devastating effects on some bird populations. Finally, Congress passed the Migratory Bird Treaty Act in 1918. The act outlawed the killing of rare whistling swans, established limited hunting seasons, and set bag limits for waterfowl migrating across international boundaries. But no legislation could protect devasted populations of Carolina parakeets and the once-common passenger pigeon. The last representatives of these species died in zoos during the 1920s, marking their final extinction and alarming concerned people everywhere.

THE CULTURAL LANDSCAPE OF URBANIZATION

Peopling Places

As noted, revolutionary industrial developments and population changes helped people make indelible marks on the region's cultural landscape between 1880 and 1930. These marks are still visible today. Chesapeake Bay cities began to assume their modern appearances during this period as skyscrapers, government buildings, commercial establishments, apartment houses, tenements, rowhouses, and many other structures rose over streets of Belgian block cobble stones, concrete sheets, and asphalt paving. The first traffic on these paved streets had been self propelled bicycles and horse or mule drawn street cars, carts, carriages, and wagons; during this period, those were largely replaced by trolleys, trucks, buses, and cars.

In the region's cities, new immigrants settled into ethnic neighborhoods with signs in their native languages. They added onion domes and other familiar architectural touches from their home countries to the abundant churches, shops, and halls in other styles, including Victorian, classical, romantic, colonial revival, and finally art moderne and art deco.

Wealthier citizens usually lived on fashionable avenues in or near city centers. Yet many of the more affluent classes began moving out of city centers to new suburbs constructed in the nearby countryside along trolley and rail lines. Often they moved to avoid the clutter and noise of urban life. In the suburbs, they engaged the services of shopkeepers and skilled, white collar workers. Often, these workers returned to rented apartments or rooms in the city after work. Wealthier residents of cities and suburbs hired live in servants who slept in separate quarters in the main house or in small buildings on house grounds.

Rural county seats became smaller replicas of major cities. Market, mill, and cannery towns also grew larger and more complex. But the smaller towns and villages in more remote areas – mostly in the extreme southern, western, and eastern parts of the region – did not change much between 1880 and 1930. Although mechanization made farming more efficient, and improvements such as refrigerator cars hurried perishable foods to market more quickly, rural farms mostly stayed at the same size and in the same locations.

People continued to live in greater numbers in places north of the Potomac River. The Eastern Shore and southeastern Virginia continued to be sparsely populated. Mass migrations of rural African Americans and poor whites occurred during and after World War I. Mostly they went to Washington and Baltimore, but they also took up residence in Richmond and Newport News. Their migration sent overall rural populations into a decline that has yet to end.

Creation of Social Institutions

The focus of the region's social life shifted even further from the family domestic sphere to more community centered organizations. This shift was obvious from the many new meeting halls, churches, campgrounds, resorts, and other facilities built between 1880 and 1930. People also built numerous courthouses, office buildings, primary and secondary schools, university campuses, and teachers' colleges (known as normal schools). In both cities and more rural areas, most were built using locally available wood, stone, brick, and glass. Railroads and ships brought in metal structural elements and fixtures. Popular architectural flourishes were crafted in Chesapeake Bay workshops or imported from elsewhere. These included reddish-brown terracotta tiles, stained glass, cut crystal windows, and intricate timber fretwork

Home and community buildings, decor, and ground plans were generally tidy and ornate in these decades. Their well ordered style celebrated middle class values of comfort and respectability, which were the social ideal at the time for most people in the region. Some people even thought that this design sense helped instil immigrants and the poor with so called American values. By adopting these values, the theory went, these people would rise from poverty. Not surprisingly, then, this middle class design sense also showed up in the hostels, soup kitchens, and settlement houses of relief organizations such as the Salvation Army and the Young Men's and Women's Christian and Hebrew Associations; in social clubs catering to particular classes, professions, or ethnic groups; and in public institutions such as sanitariums, poor houses, hospitals, and penitentiaries.

The middle class ethos also showed up in the architectural designs of the many buildings erected to house cultural institutions between 1880 and 1930. Imposing stone and brick museums and libraries, often endowed by wealthy philanthropists, shot up in the region's cities and in many of its major county seats and towns. Larger cities such as Baltimore, Washington, and Richmond supported conservatories, opera houses, art institutes, science organizations, zoological parks, and botanical gardens. Schools, colleges, and universities also mushroomed. The more successful of these soon moved from center-city office buildings to suburban campuses on the edges of towns. The more elaborate campuses boasted suites of buildings in the same architectural style. These were often located on curving, tree lined roads in park-like settings. As these suburban campuses drew businesses to their areas, many soon got swallowed up in just the sort of urban center they had tried to escape.

Popular culture also flourished in these decades. Saloons; dance, music, and vaudeville halls; gyms; ballfields; and amusement parks went up everywhere. These were mostly housed in brick or wood-framed structures, with styles ranging from sturdy and utilitarian to flashy. Burlesque halls, bordellos, and (during Prohibition) speakeasies catered to tastes that could not be acknowledged elsewhere.

Modernist movements emerged in artistic communities in cities throughout the western world around the turn of the century. Their creators strove to break with past cultural traditions. They shared a rebellious spirit, wishing to undermine the high culture they associated with elitist class distinctions and Old World snobbery. Modernists tried to create a new, native born cultural vocabulary that all Americans could understand and appreciate. Their art forms replaced

ostentation, literalness, and Victorian clutter with simplicity, abstraction, and streamlined sleekness. Modernist cultural values found expression in art moderne and art deco skyscraper and commercial design; in streamlined locomotives, airplanes, and automobiles; in literature; and in the decorative arts.

Rural areas, by contrast, maintained traditional cultural values. This was especially the case in southeastern Virginia and the Eastern Shore, where many homes continued to be built in the traditional local styles, including dogtrot and bungalow. Some of the more well to do rural families chose to live in standardized, prefabricated homes sold in mail order catalogs by new companies such as Sears. Manufacturing plants shipped these in pieces by rail, delivering them to construction sites. Commercial and public buildings in rural areas also tended to reflect more traditional cultural viewpoints and tastes.

Shaping the Political Landscape

Political struggles between rich and poor, labor and management, white and black, progressives and reactionaries, and native- and foreign-born Americans shaped political aspects of the region's cultural landscape. People gathered in halls, town squares, fields, stadiums, and other public spaces to debate the issues of the day. Lawmakers voted more and more funds for larger and more ornate halls of government. Courthouses, records halls, and prisons grew in size and grandeur as more and more police officers, lawyers, jurists, and clerks enforced laws enacted by federal, state, and local legislators. Today considered quaint and charming, the fortress-like appearance of many of these structures actually reflects the need at the time to protect law enforcement personnel from lynch mobs and attacks of anarchists and other political radicals.

Federal office buildings, courthouses, and other facilities rose in all cities and most county seats as people looked to the central government for solutions to political problems. Imposing, castle-like armories surrounded by brick or stone walls were built to store munitions, train troops, and serve as forts in case of civil revolt. Wilderness lands and important historical sites were set aside for national forests, wildlife refuges, parks, and monuments. Created in 1915, the United States Coast Guard maintained Chesapeake Bay lighthouses and policed the region's shipping lanes and fishing grounds. Also, for the first time in the nation's history, the government continued to maintain and build military bases, testing grounds, and munitions factories at a time when no war was in progress. Many of these had been built during World War I.

Developing the Chesapeake Economy

Industrial mass production came to dominate most of the region's economy. Manufacturing processes were usually centralized in large factories near rail lines, waterways, or sources of raw materials. Workers and machinery were often housed in stout brick complexes of plant buildings. These were often surrounded by fences or walls of brick or stone. Massive smokestacks belched smoke into the air, and raw factory wastes flowed into the nearest rivers and streams.

Working long hours at low wages, factory workers usually lived in row houses, tenements, or small one or two family houses near work. Supervisors and managers lived in larger middle class homes, usually on lands affording commanding views of factory complexes. Most factory owners favored high style mansions on large, landscaped lots, for both their main dwellings and their country homes. Many of their main dwellings sat in more fashionable parts of town or in suburbs – far from the grime and filth pouring from their plants. Others had their great houses built close to their factories. In northern parts of the region, many officers of corporations

owning factories and other companies competed to build ever-taller and more ornate skyscrapers in city business districts.

Banks, brokerages, insurance companies, specialty shops, professional office complexes, and growing department stores lined downtown boulevards. Vast rail yards and stockyards occupied stretches of open ground behind city terminals, while long rows of piers, shed covered wharves, and warehouses stretched across city waterfronts. Ships and trains brought unprocessed bulk products such as wheat, sugar, corn, cattle, and petroleum to concrete and steel mills, refineries, and storage tanks on the outskirts of Chesapeake Bay cities. Short haul rail lines and trucks carried fresh farm produce to nearby cities and towns. Commercial fishermen and oystermen brought their catches to Bay canneries or local marketplaces.

Tourism and the entertainment industries boomed as larger numbers of more affluent people looked for enjoyable ways to fill their leisure time. Communities and businesses throughout the region began using outdoor billboards, newspaper ads, and other new advertising techniques to draw cash carrying visitors to local attractions. These attractions included beaches, hotels, health resorts, spas, campgrounds, and amusement parks. Sport fishing also grew in economic importance as managers, executives, and well to do workers hired boats and pilots at local ports to fish for striped bass in the Bay or for marlin, yellowtail, and other game fish in the warm gulf stream currents coursing several miles out from the Atlantic's shores.

Expanding Science and Technology

As noted, scientific and technological developments of this period made an imprint that continues to dominate the region's cultural landscape to the present day. In this era, technologies based mostly on muscle power, wood, sails, steam, coal, and iron gave way to a more modern set

centered on petrochemicals, steel, and electromagnetic energy. The era also saw a shift from a wide range of local natural resources that could be used pretty much as they were to a much narrower range of imported substances that could be modified into a multitude of refined and synthetic products.

Scientists working in research centers such as Baltimore's Johns Hopkins University and the campuses of the University of Maryland made major advances in medicine, chemistry, and engineering. Scientists at the agricultural extension stations of regional land grant colleges developed new ways of farming that improved yields and conserved soil and water. The first steam powered tractors, along with new, more durable, and increasingly efficient types of metal corn cribs, barbed wire and chain link fences, and other agricultural innovations appeared. Samuel Langley and other scientists in the region's many army and navy facilities made major contributions to aeronautical, nautical, and military engineering.

Regional artisans and mechanics also continued to refine their crafts and skills. Fishermen and shipwrights used new materials and manufacturing techniques to improve vessel design and develop new types of tackle and gear. The growing popularity of sport fishing created markets that allowed Chesapeake Bay carvers to bring wooden decoy art to new heights. And because cheap, mass produced furnishings were easily available, people came to appreciate the value of finely handcrafted items. Those who could afford them sought out handcrafted, decorative merchandise, increasing demand and thus raising production levels.

Transforming the Environment

As noted, the new technologies emerging in this era gave Chesapeake Bay people the ability to transform the Chesapeake Bay environment in ways not thought possible by their ancestors. New machines and energy sources allowed people to move and manipulate unheard of volumes of goods and materials. Pumps and dredges drained wetlands to destroy the habitats of mosquitoes and other disease carrying pests. Swamps and marshes also turned into municipal waste dumps or were filled in to create new land for development. Even the earth gave way as men blasted rock with dynamite and moved it with steam shovels, bulldozers, barges, and trucks.

Monumental buildings with steel frames and stone and brick masonry were constructed in dense urban cores along avenues whose dimensions had not been changed since city founders had first laid out their original street plans. These included city halls, office buildings, churches, rail terminals, train sheds, and department stores. Powerful politicians, such as Washington mayor Alexander Shepard, gathered funds and motivated people to reverse some of the congestion plaguing his city. He wanted to turn Washington into a landscape that reflected both its nation's power and the high cost of its real estate. Shepard narrowed and paved the city's wide boulevards, planted ornamental shade trees, cleared away shanties and makeshift market stalls, and ordered railroads to meet city specified grade levels at street crossings. The city was also beautified by new and elegantly landscaped parks, cemeteries, hospital grounds, and college campuses. These were designed by such prominent landscape architects as Calvert Vaux and Frederick Law Olmsted, Jr.

Other efforts to streamline urban development in the region soon followed. Congress passed the Highway Act of 1893, providing funds to begin linking city and suburbs throughout the nation with landscaped parkways. And Washington's central mall, park system, and

monuments – along with the Beaux Arts architectural style of many of the edifices built in the early twentieth century – can be traced to the recommendations of the 1902 MacMillan Commission. Made up of a blue ribbon board that included Olmsted, architects Charles McKim and Daniel Burnham, and sculptor Augustus Saint-Gaudens, the commission's findings soon became a model adopted by other American cities, including Richmond and Baltimore.

A vast network of new roads, inter-urban rail lines, and, later, flying fields linked Chesapeake Bay cities with the countryside. Planned suburban developments, such as Roland Park, began to appear along the margins of developed urban areas. Roland Park is a large lot residential preserve built by the Olmsted firm on the outskirts of Baltimore between 1891 and 1910. An elegant, upper middle class community of homes built in several popular styles, Roland Park gradually changed from a freestanding suburban community to a residential city neighborhood as Baltimore expanded around it in the 1920s.

In rural areas, farmers using new reapers, tractors, fertilizers, and insecticides changed their products. Many turned from large scale cultivation of tobacco, wheat, or corn to production of the more perishable fruits, vegetables, poultry, and dairy products demanded by urban and suburban consumers. Automobiles and trucks dominated the region's hinterlands. Farmers drove produce to markets, fairs, and railheads; suburbanites navigated from home to work or school; and city folk took drives in the country. Continually improved, many of these roads have since become U.S. Routes and State Highways.

Changing Role of the Chesapeake in the World Community

Urban growth, technological change, and national involvement in world affairs created demands for imports as well as for faster communications. In meeting these demands, the Chesapeake Bay region grew tightly linked with the world community. As in earlier periods, wharfs, warehouses, and the many hulks of maritime vessels that sank to the bottom of Chesapeake Bay between 1880 and 1930 testify to its active maritime trade. This trade enlarged deepwater harbors at Baltimore,Norfolk, and Newport News. Surviving skipjacks recall the Prohibition years at the end of this period, when ships smuggled contraband alcohol through these ports. Ever denser concentrations of army camps, naval facilities, and munitions plants in and around Washington, D.C., bear witness to the United States's growing ability to project power across its borders in foreign conflicts, such as the Spanish-American War and World War I. These military sites include the Washington Navy Yard, the U.S. Marine Corps Barracks, and Alexandria's Torpedo Factory.

KEY LOCALES

National Historic Landmarks

District of Columbia

Administration Building, Carnegie Institute of Washington [1910]
American Federation of Labor Building [1916]
William E. Borah Apartment, Windsor Lodge [ca. 1913]
Constitution Hall [1924-1930]
Elliott Coues House [1880s]
Georgetown Historic District [eighteenth to nineteenth centuries]
Samuel Gompers House [1902-1917]
Charlotte Forten Grimke House [ca. 1880]
Charles Evans Hughes House [1907]
Lafayette Square Historic District [eighteenth to twentieth centuries]
Library of Congress [1886-1897]
Andrew Mellon Building [1916]

Memorial Continental Hall [1902]
National War College [1907]
Pension Building (National Building Museum) [1885]
American National Red Cross Building [1917]
St. John's Church [1883]
Sewall-Belmont House [1820, 1929]
Old Executive Office Building [1871-1888]
Mary Church Terrell House [1907]
Oscar W. Underwood House [nineteenth century]
U.S. Marine Corps Barracks [1906]
Volta Bureau [1893]
Washington Navy Yard [1800-1910]
David White House [1890s]
Woodrow Wilson House [1915]
Carter G. Woodson House [ca. 1890]
Robert Simpson Woodward House [ca. 1880s-1890s]

Maryland

Baltimore and Ohio Railroad Roundhouse and Annex, [1884, 1891], Baltimore City
Clara Barton House [ca. 1890], Montgomery County
Chestertown Historic District [eighteenth to nineteenth centuries], Kent County
Elmer V. McCollum House [ca. 1920], Baltimore City
H. L. Mencken House [early 1880s], Baltimore City
Mount Royal Station and Trainshed [1896], Baltimore City
Mount Vernon Place Historic District [nineteenth century], Baltimore City
Ira Remsen House [1880s], Baltimore City
Henry August Rowland House [1880s], Baltimore City
United States Naval Academy Guard House [1881], Ann Arundel County
William Henry Welch House [1880s], Baltimore City

Virginia

Fort Myer Historic District [1900s], Arlington County
Hampton Institute [1868], Hampton City
Jackson Ward Historic District [nineteenth-twentieth centuries], Richmond City
Main Street Station and Trainshed [1901], Richmond City
General William "Billy" Mitchell House [1826, 1925], Loudon and Fauquier Counties
Old City Hall [1887-1894], Richmond City
Quarters 1 [1899], Arlington County
University of Virginia Rotunda [1822-1826, 1898], Charlottesville City
University of Virginia Historic District [nineteenth-twentieth centuries], Charlottesville City
Variable Density Tunnel [1921-1940], Hampton City
Maggie Lena Walker House [ca. 1909], Richmond City

FURTHER INFORMATION

Books and Articles

Foremost among the many sources containing useful information surveying this period in Chesapeake Bay history are these works:

Carol Ashe, *Four Hundred Years of Virginia, 1584-1984: An Anthology* (1985).
Carl Bode, *Maryland: A Bicentennial History* (1978).
Daniel J. Boorstin, *The Americans* (1973).
Robert J. Brugger, *Maryland: A Middle Temperament, 1634-1980* (1988).
Suzanne Chapelle, et al., *Maryland: A History of Its People* (1986).
Federal Writers' Program, *Maryland: A Guide to the Old Line State* (1940a).
-----, *Virginia: A Guide to the Old Dominion* (1940b).
Frederick A. Gutheim, *The Potomac* (1968).
Alice Jane Lippson, *The Chesapeake Bay in Maryland* (1973).
Paul Metcalf, editor, *Waters of Potowmack* (1982).
Allen Morger, *Virginia Bourbonism to Byrd, 1870-1925* (1968).
Lucien Niemeyer and Eugene L. Meyer, *Chesapeake Country* (1990).
Edward C. Papenfuse, et al., *Maryland: A New Guide to the Old Line State* (1979).
Morris L. Radoff, *The Old Line State: A History of Maryland* (1971).
Emily J. Salmon, editor, *A Hornbook of Virginia History* (1983).
Mame and Marion E. Warren, *Maryland: Time Exposures, 1840-1940* (1984).
John R. Wennersten, *Maryland's Eastern Shore: A Journey in Time and Place* (1992).

Major environmental studies include the following:

William C. Schroeder and Samuel F. Hillebrand, *Fishes of Chesapeake Bay* (1972).
James P. Thomas, editor, *Chesapeake* (1986).
P. R. Uhler and Otto Lugger, *List of Fish of Maryland* (1876).
David A. Zegers, editor, *At the Crossroads: A Natural History of Southcentral Pennsylvania* (1994).

These useful atlases and geographic surveys graphically depict large scale development patterns in Chesapeake Bay cultural landscapes of the period:

Michael Conzen, editor, *The Making of the American Landscape* (1990).
David J. Cuff, et al., *The Atlas of Pennsylvania* (1989).
James E. DiLisio, *Maryland, A Geography* (1983).
D. W. Meinig, *The Shaping of America* (Vol. 2, 1986).

Edward C. Papenfuse, et al., *The Hammond-Harwood House Atlas of Historical Maps of Maryland, 1608-1908* (1982).
Helen Hornbeck Tanner, *The Settling of North America* (1995).
Derek Thompson, et al., *Atlas of Maryland* (1977).
Kent T. Zachary, *Cultural Landscapes of the Potomac* (1995).

Studies of individual, small scale communities include this work:

Jack Temple Kirby, *Poquosson* (1986).

Biographical accounts providing insights into individual lives include the following:

John Sherwood, *Maryland's Vanishing Lives* (1994).
William W. Warner, *Beautiful Swimmers: Watermen, Crabs, and the Chesapeake Bay* (1976).

Cultural life of the period is examined in these texts:

James M. Lindgren, *Preserving the Old Dominion: Historic Preservation and Virginia Traditionalism* (1993)..
Esther Wanning, *Maryland: Art of the State* (1998).
Dorothy Hunt Williams, *Historic Virginia Gardens* (1975).

Examples of the many studies surveying key aspects of social life of the period include the following:

Dieter Cunz, *The Maryland Germans* (1948).
Bianca P. Floyd, *Records and Reflections: Early Black History in Prince George's County, Maryland* (1989).
Mary Forsht-Tucker, et al., *Association and Community Histories of Prince George's County* (1996).
Terry G. Jordan and Matti Kaups, *The American Backwoods Frontier* (1989).
Suzanne Lebsock, *Virginia Women, 1600-1945* (1987).
Roland C. McConnell, *Three Hundred and Fifty Years* (1985).
Susan G. Pearl, *Prince George's County African-American Heritage Surve*y (1996).
Vera F. Rollo, *The Black Experience in Maryland* (1980).
Helen C. Rountree, *Pocahontas's People* (1990).
Bruce G. Trigger, editor, *Northeast* (Vol. 15, Handbook of North American Indians, (1978).
Edward C. Papenfuse, et al., *Maryland: A New Guide to the Old Line State* (1979).
Wilcomb E. Washburn, editor, *History of Indian-White Relations* (Vol. 4, Handbook of North American Indians, 1988).

Works containing useful insights into period political life include this one:

Robert B. Harmon, *Government and Politics in Maryland* (1990).

Key economic studies include the following:

Joanne Passmore, *History of the Delaware State Grange and the State's Agriculture, 1875-1975* (1975).
Glenn Porter, editor, *Regional Economic History of the Mid-Atlantic Area Since 1700* (1976).
John R. Wennersten, *The Oyster Wars of Chesapeake Bay* (1981).

Useful analyses of the region's scientific and technological developments during the period may be found in these texts:

Thomas F. Hahn, *The Chesapeake and Ohio Canal* (1984).
David A. Hounshell, *From the American System to Mass Production, 1800-1932* (1984).
Walter S. Sanderlin, *The Great National Project: A History of the Chesapeake and Ohio Canal* (1946).
Fred A. Shannon, *The Farmer's Last Frontier: Agriculture, 1860-1897* (1945).

Surveys examining the region's built environment include the following:

Michael Bourne, et al., *Architecture and Change in the Chesapeake* (1998).
Henry Glassie, *Pattern in the Material Folk Culture of the Eastern United States* (1968).
-----, *Folk Housing in Middle Virginia* (1975).
Bernard L. Herman, *Architecture and Rural Life in Central Delaware, 1700-1900* (1987).
Terry G. Jordan, *American Log Buildings* (1985).
Gabrielle M. Lanier and Bernard L. Herman, *Everyday Architecture of the Mid-Atlantic* (1997).
Calder Loth, *Virginia Landmarks of Black History* (1995).
Norris F. Schneider, *The National Road, Main Street of America* (1975).
Dell Upton, editor, *America's Architectural Roots* (1986a).
-----, editor, *Holy Things and Profane* (1986b).
----- and John Michael Vlach, editors, *Common Places* (1986).

Archeological studies include these:

William M. Kelso and R. Most, editors, *Earth Patterns* (1990).
Paul A. Shackel and Barbara J. Little, *Historical Archaeology of the Chesapeake, 1784-1994* (1994).

Paul Shackel, et al., editors, *Annapolis Pasts* (1998).

These are among the many studies focusing on the development of Washington D.C. as a cosmopolitan center:

Constance M. Green, *Washington: A History of the Capital, 1879-1950* (1962).
Frederick A. Gutheim, *Worthy of the Nation* (1977).
Fredric M. Miller and Howard Gillette, Jr., *Washington Seen: A Photographic History, 1875-1965* (1995).

The evolution of Baltimore as the region's most important urban center is traced in these works:

Isaac M. Fein, *The Making of an American Jewish Community* (1971).
Leroy Graham, *Baltimore: The Nineteenth-Century Black Capital* (1982).